

In the Claims:

Please cancel claims 1-39.

Please add the following new claims 40-79.

40. (New) A beam scanner, comprising:

a plurality of light sources operable to emit a plurality of respective beams of light; and

at least one beam deflector aligned to receive the plurality of beams of light from the plurality of light sources and operable to scan the beams across respective overlapping regions of a field of view.

41. (New) The beam scanner of claim 40, wherein the plurality of light sources includes a plurality of light emitting diodes.

42. (New) The beam scanner of claim 41, wherein the plurality of light emitting diodes are operable to produce a plurality of colors of light.

43. (New) The beam scanner of claim 43, wherein the plurality of light emitting diodes are operable to produce a plurality of beams in each of the plurality of colors of light.

44. (New) The beam scanner of claim 40, wherein the plurality of light sources are operable to vary the intensity of the plurality of beams.

45. (New) The beam scanner of claim 44, wherein the plurality of light sources are operable to vary the intensity of the plurality of beams to blend overlapping regions of the field of view.

46. (New) The beam scanner of claim 45, wherein the light sources are operable to produce pixels, and data corresponding to pixel values is scaled to limit the intensity of overlapping pixels in the overlapping regions of the field of view.

47. (New) The beam scanner of claim 40, wherein the at least one beam deflector is a single beam deflector.

48. (New) The beam scanner of claim 40, wherein the at least one beam deflector includes a microelectromechanical (MEMs) scanner.

49. (New) The beam scanner of claim 48, wherein the microelectromechanical (MEMs) scanner is operable to scan the plurality of beams in at least two dimensions.

50. (New) The beam scanner of claim 49, wherein the overlapping regions of the field of view are arranged such that each region extends horizontally across substantially the entire field of view and overlaps with at least one vertically adjacent regions.

51. (New) The beam scanner of claim 40, wherein the overlapping regions are substantially distinct and overlap slightly.

52. (New) A method for blending illuminated regions in a field of view, comprising the steps of:

generating a plurality of beams of light;

directing the plurality of beams of light toward a scanner;

scanning the plurality of beams of light across a field of view, whereby each of the plurality of scanned beams illuminates a respective region of the field of view that overlaps with at least one other of the respective regions; and

modulating the intensity of each of the plurality of beams of light to compensate for the illumination energy produced by the other beams.

53. (New) The method for blending illuminated regions in a field of view of claim 52, further comprising the step of:

modulating the intensity of the beams to produce an image on the field of view.

54. (New) The method for blending illuminated regions in a field of view of claim 52, wherein the illuminated field of view includes an image plane in a display.

55. (New) The method for blending illuminated regions in a field of view of claim 54, wherein the image plane includes the retina of a user.

56. (New) The method for blending illuminated regions in a field of view of claim 54, wherein the image plane includes a projection screen.

57. (New) The method for blending illuminated regions in a field of view of claim 56, wherein the projection screen is a rear projection screen.

58. (New) The method for blending illuminated regions in a field of view of claim 56, wherein the projection screen is a front projection screen.

59. (New) The method for blending illuminated regions in a field of view of claim 52, further comprising the steps of:

receiving a image for display; and
modulating the intensity of the plurality of beams of light to produce an illuminated pattern in the field of view corresponding to the image.

60. (New) The method for blending illuminated regions in a field of view of claim 59, wherein the illuminated pattern is formed from pixels generated by the plurality of beams of light.

61. (New) An image capture device, comprising:

a beam scanner operable to scan a plurality of beams across a field-of-view;
a detector aligned to receive beam energy scattered from the field-of-view and output an electrical signal corresponding to the received energy; and
a controller coupled to receive the electrical signal from the detector and output a representation of the received beam energy.

62. (New) The image capture device of claim 61, further comprising:
a mechanical housing that encloses the beam scanner, detector and controller.

63. (New) The image capture device of claim 62, wherein the mechanical housing includes a window for transmitting and receiving light energy.

64. (New) The image capture device of claim 61, wherein the plurality of beams are encoded to make them distinct.

65. (New) The image capture device of claim 64, wherein the plurality of beams are produced at two or more distinct wavelengths.

66. (New) The image capture device of claim 64, wherein the plurality of beams are modulated at carrier frequencies.

67. (New) The image capture device of claim 64, wherein the plurality of beams are emitted sequentially.

68. (New) The image capture device of claim 61, wherein the plurality of beams are scanned across a respective plurality of regions of the field-of-view.

69. (New) The image capture device of claim 68, wherein the plurality of respective regions at least partially overlap over at least a portion of a depth-of-field.

70. (New) The image capture device of claim 69, wherein the controller is operable to stitch together data corresponding to the plurality of regions.

71. (New) A scanned beam display, comprising:
a controller operable to receive an image signal and generate a control signal having plural instances of at least some pixels; and

a beam scanner coupled to receive the control signal from the controller and operable to scan a plurality of at least partially overlapping beams across a field-of-view.

72. (New) The scanned beam display of claim 71, wherein the plural instances of pixels correspond to the regions of beam overlap.

73. (New) The scanned beam display of claim 72, wherein each beam contributing to an overlapping region receives a scaled portion of the energy allocated to each pixel in the overlapping region.

74. (New) The scanned beam display of claim 73, wherein the scaled portion of energy allocated to each pixel is selected to blend the overlapping region.

75. (New) The scanned beam display of claim 72, wherein the controller is operable to cause scaling of power delivered to each of the plural instances of pixels.

76. (New) The scanned beam display of claim 45, wherein the scaling of power is operative to blend the at least partially overlapping beams.

77. (New) The scanned beam display of claim 71, further comprising:
a screen aligned to receive the scanned beams.

78. (New) The scanned beam display of claim 77, wherein the screen is a projection screen for viewing by an observer.

79. (New) The scanned beam display of claim 78, further comprising:
a beam expander aligned to receive the scanned beams and operable to project beamlets to the eye of an observer.